**LetNo**      ZP96-0601

**Date**       961008

**Revised**    961008

**Class**      IBM Europe
               Programming Announcement

# Title

IBM Communications Server for AIX Version 4.2

# Program Number

```
Type Model      Program
Number          Name

5765-652        Communications Server for AIX Version 4.2
```

# Software Advantage for Workstations Agreement

The product is not eligible.

# Upgrade Protection Standard Offering

The product is not eligible.

AIX SOFTWARE UPGRADE PROTECTION PLAN:

The product is eligible to IBM Software Upgrade Protection Plan for AIX and UNIX Operation System Based Software (Software Upgrade Protection Plan). Refer to IBM announcement letter ZP95-0444 dated October 31, 1995.

# Overview

IBM further extends the networking capabilities of the Communications Server for AIX, a member of the IBM Software Server Family.

This new release of the Communications Server includes the function-rich characteristics of the existing Version 4.1, plus the following enhancements:

- High Performance Routing (HPR)

- Dependent LU Requester (DLUR)

- AnyNet Sockets over SNA Gateway

- API Enhancement - Non-Blocking CPI-C

- Performance Enhancements

# Availability

```
+--------------------------------------------------------------+
|            Program Name               |    Availability      |
|                                       |                      |
+--------------------------------------------------------------+
|                                       |                      |
|                                       |                      |
| IBM Communications Server for AIX V4.2|                      |
|  - English version                    |    November 1996     |
|  - French  version                    |    November 1996     |
|  - German  version                    |    November 1996     |
|  - Italian version                    |    November 1996     |
|  - Spanish version                    |    November 1996     |
|                                       |                      |
|                                       |                      |
+--------------------------------------------------------------+
```

## Availability of National Languages

National languages are supported as above listed.

# Marketing Information

## Marketing Channels

IBM Marketing Representative

IBM Business Partners (*) acting as Remarketers of IBM Networking Products (Advanced),

IBM Business Partners (*) acting as Remarketers of IBM RISC System/6000

IBM Application Marketing Associates

IBM Software Remarketers

Industrial Integrators

(*) Business Partners are called Business Associates in U.K. and Ireland.

## Marketing Strategy

The IBM Software Server strategy is to add value to an existing network. IBM will provide servers that are easy to integrate into existing environments, providing total solutions for customer executives, MIS professionals, department managers, administrators (system, network, or database), system programmers, and software developers.

The Communications Server for AIX product should be directly associated with the marketing strategy, plans, and activities for the RS/6000 and the AIX V4 operating system.  This includes the uniprocessor (UP) and symmetric multiprocessing (SMP) systems environments.

The Communications Server for AIX provides SNA connectivity and TCP/IP interoperability to RS/6000 customers who want to:

- Connect into existing SNA networks

- Establish new SNA networks

- Integrate TCP/IP and SNA networks

- Connect over WAN using SDLC or X.25 or over LANs using IBM's Token-Ring, Ethernet, or FDDI protocols

- Take advantage of the peer-to-peer distributed networking capabilities of advanced peer-to-peer networking (APPN) in existing SNA networks

## Program Services

Such services will be in accordance with the Service Statement included in the program package, and will be available until the Service End Date.

Central Service through mail or fax will be provided by IBM until November 30, 1998.

Additional fee support will be provided through the IBM Support Line and Country specific service offerings. Please contact IBM for further information on what is available in your Country.

This program will be subject to the terms of the IBM International Program License Agreement (IPLA) contained in the program package, and not to the Agreement for IBM Licensed Programs.

This Statement is complementary to the IBM IPLA contained in this package:

```
Program Name: IBM Communications Server for AIX, Version 4.2
Program Number: 5765-652
Service End Date: November 30, 1998
```

For program defect related problems, the following procedure for assistance in problem identification is applicable:

- Contact your remarketer or distributor or, alternatively
- Mail or fax the written problem description to IBM.

IBM will reply in writing with information about correction, bypass or restriction with the intent to make the program perform according to its specifications, or, if there are none, to its principles of operation.

Customer information needed when submitting a problem:

- Address and contact name
- Current maintenance/Corrective Service Diskette (CSD) level
- Problem Description (typed, not hand written)

Additional information on customer reported problems can be obtained from your remarketer/distributor or IBM.

## Software Advantage for Workstations Agreement

The product is not eligible.

AIX SOFTWARE UPGRADE PROTECTION PLAN:

The product is eligible to IBM Software Upgrade Protection Plan for AIX and UNIX Operation System Based Software (Software Upgrade Protection Plan). Refer to IBM announcement letter ZP95-0444 dated October 31, 1995.

## Marketing Support

## Demonstrations

Looking for an easy way to show the power of our AIX SNA and TCP/IP Interoperability Networking Products for AIX to your accounts?  Demonstration copies of our AIX SNA family for AIX V3.2, V4.1, and V4.2 are available on either the internal IBM Home Page or VM VNET.  The demonstration code is a "timeout version" that expires in 60 days after first starting the software, except for SNA Application Access for AIX, which expires in 90 days.

You can access via the WWW URL:

- http://aa1rtp10.raleigh.ibm.com/aixsna/distrib/demo.html

Point and click to download demonstration code and documentation for the following:

```
o  AIX SNA Family (AIX 3.2.x)
   - AIX SNA Server/6000 V2.1.2 (5765-247)
   - AIX SNA Gateway/6000 V2.1.2 (5765-261)
   - SNA Client Access for AIX V1.2 (5696-944)
   - SNA Application Access for AIX V1.2  (5696-943)
   - AIX SNA Softcopy Publications
   - APPC Application Suite
   - SNAPI Interactive Transaction Development Tool

o  AIX SNA Family (AIX 4)
   - Communications Server for AIX V4 (5765-652)
   - SNA Client Access for AIX V1.2
   - SNA Application Access for AIX V1.2
   - AIX SNA Softcopy Publications
   - APPC Application Suite
   - SNAPI Interactive Transaction Development Tool

The demonstration packages on VM VNET include code, documentation,
and a README file that explains how to move the files from VM to AIX
and install.  To access via VM VNET, type the following command:

   TOOLS SENDTO RALVM5 SERC AIXSNAP GET FILENAME PACKAGE
     where FILENAME = any of the below packages

o  AIX SNA Family (AIX 3.2.x)
   - SS32DEMO Package - AIX SNA Server/6000 V2.1.2 (5765-247)
   - GW32DEMO Package - AIX SNA Gateway/6000 V2.1.2 (5765-261)
   - CA12DEMO Package - SNA Client Access for AIX V1.2 (5696-944)
   - AA11DEMO Package - SNA Application Access for AIX V1.2
                        (5696-943)

o  AIX SNA Family (AIX 4)
   - CS41DEMO Package - Communications Server for AIX V4 (5765-652)
   - CA12DEMO Package - SNA Client Access for AIX V1.2 (5696-944)
```

For more information on demostration packages, send a note to snaserv@vnet.ibm.com or RALVM12(SNASERV).

For additional demonstration information, see the NSC DEMOSPRES database on HONE.

## Promotional Material

INEWS, under the AIX + RS category, contains references to promotional materials that support this announcement. Promotional materials are also available on MKTTOOLS.

The following brochures are available:

- IBM Communications Servers (G325-3565)
- IBM Communications Server for AIX (G325-3572)

## Education Support

There is no educational support planned for this product.

## HONE Information

EMEA's software configurator, CFSW, will support these products.

### Configurator Information

The following configurator aids will be updated to support this announcement:

```
    Configurator Aid    Date Available
    ------------------   --------------
         CFSW               10/08/96
        PCRS6000            10/08/96
```

This support will be provided on ELINK and EHONE and will be available to customers eligible to use IBMLINK.

# Installation Information

## Professional and Technical Services

Services providing for the installation, implementation and/or integration of this product are available from IBM. Services to be defined with Country Services Organisation.

# Administrative Information

## Special Bid Requests

Requests for Special Bid Offerings should be directed through the Country SBO Organization. Contact the Country SBO Manager for further information.

# Ordering Information

Refer to SWORDERINFO and CFSW on HONE.
Current users of IBM Communications Server for AIX Version 4 should place MES orders via AIX V4.2 SPO 5692-AIX.  A 5692-AIX SPO is mandatory for shipment of program and publications.

Refer to the "Ordering Information" in External part of IBM Programming announcement letter ZP96-0239, dated March 12, 1996.

## Order Control Codes
Warning:
Previous release has been named V4.1 (NOT V4.0).

There is no change compared to the previous release announcement of this IPLA program.

EMEA Brand Manager: Daniel GABORIT (gaborit at lgeprofs) - BMgr code: G

## License Management/Password Information

A license management tool is available to manage the number of users or usage of this product.

## Programming RPQs

Requests will be accepted beginning on the first customer shipment date.  Response time and delivery vary depending on the complexity of the order.

## EMEA Pricing Statement

Consult your pricing organisation for pricing information regarding this announcement.

# International Volume Offering

The product(s) listed below is/are eligible for the International Volume Offering (IVO) Exhibit and is/are added to one of its Categories as defined below:
(NOTE - the IVO Exhibit is NOT published to Customers).

```
Program                                         IVO
Number     Program Description                  Category

5765-652   IBM Communications Server for AIX V4.2     B
```

# Terms and Conditions for Remarketers

Available to IBM Business Partners acting as Remarketers for Networking Products (Advanced), under the terms of the Business Partner Agreement.

Available to IBM Business Partners acting as Remarketers for RISC System/6000 under the terms of the Business Partner Agreement.

## Warranty

IBM standard warranty of media. Warranty period 3 months (or the period required by local legislation, if greater).

### Update to the Summary of product related Terms and Conditions applicable to IBM Remarketers for IBM Networking Products (Advanced), RISC System/6000

This program is added to the list of Category 2 - IBM Program Packages specified under entry number 3 (Programs and Categories).

## Education Program

The Education Program does not apply.

## Program Services

Program Services if available, and any refresh or update shipments, will be available to IBM Remarketers.

Additional fee support through IBM Support Line is provided for Remarketers.

# Terms and Conditions for Industrial Integrators

Available to Industrial Integrators under the terms of the agreement for supply of IBM products to Industrial Integrators.

### Summary of product related Terms and Conditions applicable to IBM Networking Products (Advanced), RISC System/6000 under the Industrial Integrator Offering

This program is added to the list of Category 2A-IBM Program Packages specified under entry number 3 (Programs and Categories).

# Announcement Countries

All European, Middle Eastern and African Countries.

# IBM Announcement Letter No. ZP96-0601 dated October 08, 1996.

See final section for details of availability and limitations, if applicable.

## Title

IBM Communications Server for AIX Version 4.2

## Overview

IBM further extends the networking capabilities of the Communications Server for AIX, a member of the IBM Software Server Family.

This new release of the Communications Server includes the function-rich characteristics of the existing Version 4.1, plus the following enhancements:

- High Performance Routing (HPR)

- Dependent LU Requester (DLUR)

- AnyNet Sockets over SNA Gateway

- API Enhancement - Non-Blocking CPI-C

- Performance Enhancements

## Intended Customers

The Communications Server for AIX provides a full range of communications and connectivity offerings for the RISC System/6000 and AIX operating systems if you have:

- Connectivity requirements for existing SNA hierarchical networks or those taking advantage of the peer-to-peer distributed networking capabilities of advanced peer-to-peer networking (APPN),

- Multiprotocol networks (SNA and TCP/IP) and want to use applications written for one protocol in a network using the other protocol.

## Key Prerequisites

Communications Server for AIX requires either AIX Version 4.1.2, and later, or AIX Version 4.2. The support includes the uniprocessor and symmetric multiprocessing hardware system environments.

## At a Glance

Communications Server for AIX provides RS/6000 customers with:

- A broad range of communication, connectivity, and networking options

- A powerful gateway

- Multiprotocol support

- Single-session 3270 emulation capability

2

Enhancements include:

- High Performance Routing (HPR) an end-to-end connection-oriented protocol that improves network availability, performance, and SNA congestion control

- Dependent LU Requester (DLUR) providing a means of transporting LU traffic through an APPN network

- AnyNet Sockets over SNA Gateway function

- Non-blocking enhancement to CPI-C API

- Performance enhancements providing improved throughput with SDLC and support for an increased number of concurrent sessions.

# General Availability

```
+----------------------------------------------------------------+
|          Program Name               |    Availability    |
|                                     |                    |
+----------------------------------------------------------------+
|                                     |                    |
|                                     |                    |
| IBM Communications Server for AIX V4.2|                  |
| - English version                   |    November 1996   |
| - French  version                   |    November 1996   |
| - German  version                   |    November 1996   |
| - Italian version                   |    November 1996   |
| - Spanish version                   |    November 1996   |
|                                     |                    |
+----------------------------------------------------------------+
```

# Program Number

```
Type Model      Program
Number          Name

5765-652        Communications Server for AIX Version 4.2
```

# Description

# High Performance Routing

High Performance Routing (HPR) is an end-to-end, connection-oriented protocol that allows you to optimize communications across the network. These capabilities include:

- Improved network availability through end-to-end connections, alternate route calculations, and transmission resumption if an intermediate link or node fails.

- Improved network performance by only performing error recovery at the endpoints of the network and by selectively retransmitting only lost or erroneous packets.

- Improved SNA congestion control by constantly monitoring and adjusting the amount of data flowing between the endpoints, ensuring they do not overload.

This release will provide the HPR base support function, also known as Automatic Network Routing (ANR) over the token-ring, Ethernet, FDDI, X.25, and SDLC physical data transports. The Rapid Transport Protocol (RTP) portion of HPR will not be provided in this release of Communications Server for AIX Version 4.2.

## Dependent LU Requester (DLUR)

Dependent LU Requester/Server (DLUR/S) provides a means of transporting dependent LU traffic through an APPN network. A DLUR is an APPN end node or network node that owns dependent LUs, but requests that a DLUS provide the system services control point (SSCP) for those dependent LUs. A DLUS controls conversion from a subarea environment to an APPN environment, allowing central management control of remote dependent LUs to be maintained while benefiting from an APPN network.

DLUR, in conjunction with VTAM's dependent LU server (DLUS) function, enables dependent LUs (LU0, 1, 2, 3, and dependent LU6.2) to operate unchanged in an APPN network, without changing applications. The DLUS establishes an LU6.2 session with, and provides SSCP services to, the DLUR node. Any number of dedicated physical units (PUs) can be defined on the LU6.2 sessions. The Gateway function of Communications Server can be used to provide services to the downstream dependent LUs.

The following functions are supported in this release:

- Local LUs

- Downstream LUs by using SNA Gateway

- SSCP takeover

- Multisubnet

- DLUS Backup - If a DLUS becomes unavailable, LUs are automatically reconnected to a pre-configured backup DLUS.

DLUR allows customers to protect their investment in 3270 emulation and other dependent LU applications while migrating new applications to LU6.2 and APPN.

## AnyNet Sockets over SNA Gateway

The AnyNet Sockets over SNA Gateway function connects SNA and TCP/IP networks to allow sockets applications data to flow freely across both environments. Workstations and hosts in SNA networks can run sockets applications and appear to be directly connected to the TCP/IP network. In addition, dual gateways can be used to connect TCP/IP networks across an SNA network. All of the connections are to be made with no changes to the sockets applications, TCP/IP network, or SNA network. This capability provides the benefits of the SNA network to the TCP/IP applications and eliminates the need for parallel networks.

The AnyNet Sockets over SNA Gateway will support the following socket connection types:

- Stream sockets connection

- Datagram sockets connection

## Performance Enhancements

Communications Server for AIX, Version 4.2 now supports V.35 communication links up to 1.54 megabits/second for SDLC. This support has achieved throughput of up to 100 KBytes/second, a 20 times increase over 56 Kbps lines.

Communications Server for AIX, Version 4.2 supports up to 50,000 concurrent sessions. Various session types

require varying amounts of processor and memory resources. The maximum number of sessions will vary depending on the mix of session types and the hardware configuration. Refer to the Communications Server for AIX Planning and Performance Guide for system information.

# Product Positioning

Communications Server for AIX is positioned to meet a wide range of customer requirements by providing APIs, such as LU0, LUs 1, 2, and 3, LU6.2, and CPI-C to allow user-written applications to communicate with other applications using IBM's SNA as the communications protocol.

The full implementation of APPN (end node and network node), along with the integrated gateway capabilities, positions the RISC System/6000, via Communications Server, as a participant in either a host (hierarchical) or peer-to-peer distributed network environment.

Communications Server for AIX provides customers with the benefit of a single product that supports both UP and SMP hardware.

With the integrated AnyNet capabilities, Communications Server for AIX is positioned for customers with multiprotocol networking environments. The TCP/IP Sockets applications can run over SNA networks and APPC applications can run over TCP/IP networks without changing the applications or modifying the hardware.
**National Language Support:**

Messages and help screens are available for the following languages: Japanese, Chinese, Taiwanese, Korean, Brazilial/Portuguese, German, French, Italian, and Spanish.

# Supplemental Information

# Software Advantage for Workstations Agreement

The product is not eligible.

# Upgrade Protection Standard Offering

The product is not eligible.

AIX SOFTWARE UPGRADE PROTECTION PLAN:

The product is eligible to IBM Software Upgrade Protection Plan for AIX and UNIX Operation System Based Software (Software Upgrade Protection Plan). Refer to IBM announcement letter ZP95-0444 dated October 31, 1995.

# Publications

One copy of the following publications is supplied automatically with the basic machine-readable material:

```
Title                                                      Form  Number
-----------------------------------------------------------------------
Communications Server for AIX: Up and Running              SC31-8247
Communications Server for AIX: User's Guide               SC31-8211
Communications Server for AIX: Configuration Reference    SC31-8213
Communications Server for AIX: Commands Reference         SC31-8214
Communications Server for AIX: Diagnosis Guide and Messages  SC31-8215
```

The following optional hardcopy publications can be ordered for a fee immediately after product availability:

```
Title                                                      Form  Number
-----------------------------------------------------------------------
Communications Server for AIX: General Information          SC31-8198
Communications Server for AIX: Transaction Program Reference  SC31-8212
Communications Server for AIX: CPI-C Programming Guide     GG31-8210
Communications Server for AIX: Planning and Performance Guide SC31-8220
Communications Server for AIX: Gateway User's Guide        SC31-8216
Communications Server for AIX: AnyNet Guide to Sockets     SC31-8217
                over SNA
Communications Server for AIX: AnyNet Guide to APPC        SC31-8221
                over TCP/IP
APPC Application Suite for AIX User's Guide                SC31-8218
```

**Displayable Softcopy Publications** Publications for Communications Server for AIX are provided in displayable softcopy form, available in English only. All unlicensed manual are included.

---

# Technical Information

## Specified Operating Environment

### Hardware Requirements

Communications Server for AIX, Version 4 runs on RISC System/6000 systems. These programs can be used on all RISC System/6000, PowerPC, and SP2 systems that support AIX Version 4.1.2 and later (Program number 5765-393) or Version 4.2 and later (Program number 5765-393).

One or more of the following network communication adapters are required:

- Token-Ring:
    - Token-Ring High Performance Network Adapter (#2970)
    - IBM 16/4 PowerPC Token-Ring Adapter (#2971)
    - Auto Token-Ring LAN Streamer 32 MC Adapter (#2972)
    - PCI AutoLANStreamer Token-Ring Adapter (#2979)

- Ethernet:
    - High-Performance LAN Adapter (#2980)
    - IBM ISA Ethernet Adapter (#2981)
    - IBM PCI Ethernet BNC/RJ-45 Adapter (#2985)
    - IBM PCI Ethernet AUI/RJ-45 Adapter (2987)
    - Ethernet/FDX 10 Mbps TP/AUI MC Adapter (#2992)
    - Ethernet/FDX 10 Mbps BNC/AUI MC Adapter (#2993)
    - Integrated Ethernet Adapters

- SDLC:

- 4-Port Multiprotocol Communications Controller (#2700)
- ISA MPQP Adapter (#2701)
- Single port, Multiprotocol Adapter/A (#2959)

- X.25:
  - X.25 Interface Co-Processor/2 (#2960)
  - X.25 Interface Co-Processor - ISA  (#2961)
  - Portmaster Adapter/A - 1 MB  (#7006)
  - Portmaster Adapter/A - 2 MB  (#7008)
  - Multiport Model 2 - ISA     (#2701)
  - ARTIC960 Co-Processor - 4 MB  (#2924)
  - ARTIC960 Co-Processor - 8 MB  (#2928)

- IBM Fiber Distributed Data Interface (FDDI) Adapters plus appropriate cables for attachment to a FDDI network:
  - FDDI Single-Ring Adapter  (#2720)
  - Fiber Single-Ring Adapter (#2724)
  - FDDI Dual-Ring Upgrade  (#2722)
  - Fiber Dual-Ring Adapter (#2723)
  - STP Single-Ring Adapter (#2725)
  - STP Dual-Ring Upgrade (#2726)

- ESCON Channel Adapter (#2756) plus:
  - ESCON optional cooling fan (#6506) is required for RISC System/6000 Model 7013
  - ESCON fiber optic cabling and connectors

- Block Multiplexer Channel Adapter (#2755) plus:
  - Block Multiplexer Adapter Cable (#2757)
  - Block Multiplexer Interface Assembly (#2758)
  - Bus and Tag cable of appropriate length

For additional on-going information pertaining to adapter support, contact: snaserv@vnet.ibm.com or RALVM12(SNASERV).

**Memory Requirements:** A RISC System/6000 workstation running Communications Server for AIX, Version 4 needs the following minimal fixed-disk storage capacity:

- 16MB for Communications Server for AIX (plus an additional 5MB of temporary storage during installation)

- 0.5MB to 1.0MB per language for messages, depending on the language.

Note: An average installation could require the following:

- 28MB for Communications Server for AIX (plus an additional 7MB of temporary storage during installation)

- 0.5MB to 1.0MB per language for messages, depending on the language.

The following additional storage requirements apply for optional packages that can be installed in addition to the base Communications Server program:

- 3MB for SNA Gateway capability

- 1MB for the Xsna graphical user interface

- 0.5MB for APPC Application Suite for AIX

- 0.8MB for APPC Interactive Application Development Toolkit (SNAPI)

The following additional storage requirements apply when the publications are installed in softcopy form:

- 19.8MB for the DynaText browser for Communications Server

- 0.2MB for the first Communications Server softcopy publication installed (storage required for DynaText style definitions shared by all of the SNA Server softcopy publications)

- 1.4MB for Up and Running Guide

- 2.6MB for Communications Server: User's Guide

- 3.1MB for Configuration Reference

- 2.7MB for Diagnosis Guide and Messages

- 1.7MB for Command Reference

- 4.3MB for Transaction Program Reference

- 1.4MB for SNA Gateway: User's Guide

- 1.0MB for APPC Application Suite for AIX: User's Guide

- 1.2MB for AnyNet Guide to APPC over TCP/IP

- 1.3MB for AnyNet Guide to Sockets over SNA

- 1.2MB for CPI-C Programming Guide

- 1.2MB for Channel Connectivity User's Guide

- 1.2MB for ESCON User's Guide

- 1.2MB for Block Multiplexer Channel Adapter User's Guide

Communications Server for AIX, Version 4 functions in 16MB of real memory, but most typical configurations need 32MB for effective performance.

**Note:** Memory and fixed disk requirements for other licensed programs, user applications, and data are not included in these requirements.

## Software Requirements

Communications Server for AIX Version 4.2 requires either AIX Version 4.1.2 (5765-393) or later or AIX Version 4.2 (Program number 5765-655)

Note: The Communications Server for AIX is a part of the IBM Software Server Family of products. Version 4 of the Software Servers were certified to work together through integration testing to run on top of AIX Versions 4.1.4 and 4.2. (Program number 5765-393). The testing included short and long runs under stressed environments.

## Compatibility

Communications Server for AIX Version 4 is not compatible with:

- AIX Version 3.2.X (Program number 5756-030).

Communications Server for AIX Version 4 is compatible with:

- ESCON Channel Connectivity for AIX Version 1.1 (5765-603)

- Block Multiplexer Channel Connectivity for AIX Version 1.1 (5765-604)

## Limitations

The common installation procedures for all software servers for AIX requires AIX Version 4.1.4, and later, including AIX Version 4.2. The normal product installation procedures for SNA Server for AIX Version 3.1 are used for AIX Version 4.1.2 and 4.1.3 systems. Refer to the Communications Server for AIX: Up and Running document for details.

Diskless workstations are not supported.

High Performance Routing (HPR) is only supported on the following versions of AIX when the associated APARs are installed:

- AIX Version 4.1.2 with APAR IX60351
- AIX Version 4.1.3 with APAR IX60351
- AIX Version 4.1.4 with APAR IX60351
- AIX Version 4.1.5 - No APAR required
- AIX Version 4.2.0 with APAR IX60672

## Performance Considerations

Communications Server for AIX, Version 4 contains many performance and tuning recommendations. Refer to SNA Server for AIX: Planning and Performance Guide (SC31-8220) for details.

Performance can be affected by:

- Type of connection and network characteristics
- Number of user and concurrent sessions
- Type of tasks
- Available installed memory
- RAS and/or trace activity

# Planning Information

## Packaging

The following packaging information applies to this program:

- The Communications Server for AIX product can be shipped either preinstalled on system DASD, on 1/4-inch tape, 8-mm or 4-mm tape, or on CD-ROM.
- Entitled documentation to support this product is provided in hardcopy.

# Security, Auditability and Control

Communications Server for AIX uses the security and auditability features of AIX Version 4.

User management is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

# Ordering Information

Consult your IBM Marketing Representative.

Current licensees:

Current users of IBM Communications Server for AIX Version 4.1 must order Version 4 Release 2 via 5692-AIX SPO. A 5692-AIX SPO is mandatory for shipments of program distribution and publications.

Basic License:

Refer to the "Ordering Information" section of IBM Programming announcement letter ZP96-0239, dated March 12, 1996.

# Professional & Technical Services

Services providing for the efficient installation, implementation and/or integration of this product are available from IBM as either standard or customised offerings.
Contact your Marketing Representative for the full scope of the available services.

# Charges, Terms & Conditions for IPLA Program Package

## Terms and Conditions

Charges, Terms and Conditions are not affected by this announcement.

### License Information

This section should be read in conjunction with the following two sections on Warranty and Program Services.

These are the additional terms referred to in the International Program License Agreement (IPLA).

This License is for IBM Communications Server for AIX Version 4.2

Your Proof of Entitlement document from IBM will identify the feature purchased.

### Warranty

IBM standard warranty of media. Warranty period 3 months (or the period required by local legislation, if greater).

### Program Services

Such services will be in accordance with the Service Statement included in the program package, and will be available until the Service End Date.

Central Service through mail or fax will be provided by IBM until November 30, 1998.

Additional fee support will be provided through the IBM Support Line and Country specific service offerings.
Please contact IBM for further information on what is available in your Country.

This program will be subject to the terms of the IBM International Program License Agreement (IPLA) contained in the program package, and not to the Agreement for IBM Licensed Programs.

This Statement is complementary to the IBM IPLA contained in this package:

```
Program Name: IBM Communications Server for AIX, Version 4.2
Program Number: 5765-652
Service End Date: November 30, 1998
```

For program defect related problems, the following procedure for assistance in problem identification is applicable:

- Contact your remarketer or distributor or, alternatively
- Mail or fax the written problem description to IBM.

IBM will reply in writing with information about correction, bypass or restriction with the intent to make the program perform according to its specifications, or, if there are none, to its principles of operation.

Customer information needed when submitting a problem:

- Address and contact name
- Current maintenance/Corrective Service Diskette (CSD) level
- Problem Description (typed, not hand written)

Additional information on customer reported problems can be obtained from your remarketer/distributor or IBM.

## Software Advantage for Workstations Agreement

The product is not eligible.

AIX SOFTWARE UPGRADE PROTECTION PLAN:

The product is eligible to IBM Software Upgrade Protection Plan for AIX and UNIX Operation System Based Software (Software Upgrade Protection Plan). Refer to IBM announcement letter ZP95-0444 dated October 31, 1995.

## Educational Allowance

Educational Allowance applies.

Education Software Allowance Program applies.

# Announcement Countries

All European, Middle Eastern and African Countries.

The data in this letter is subject to the disclaimer in Letter ZS90-0112, which is available from IBM on request.

Please note this is an international announcement letter. If applicable you should also refer to your local country complementary document to check for country specific information.

*********** End of Document ***********